Serial No.: 10/585,389



IN THE SPECIFICATION

Please delete the Abstract of the Invention and replace it with the following Paragraph:

The present invention is a unitary steel wheel having a 5° taper bead seat in conjunction with a well or drop center rim. The unitary wheel comprises a center disk and an outer rim formed from a single blank, with the center disk and rim portions being formed through a novel fabrication process which allows the unitary wheel to be formed without the limitations of the prior art, i.e, the necessity to form the wheel in parts, or to impose drawbacks from alternate fabrication methods. The process of the present invention involves the spin-forming of a steel blank to form a pre-form in a first, followed by the pre-form being further spin-formed to produce the outer rim section.

Please insert the following paragraph before Paragraph 0001:

The present application is a United States National Application, claiming priority from PCT Application Serial No. PCT/IN2005/000006, titled "Wheels of Unitary Construction and Method of Making Same", which application claims the priority of both Indian Patent Application No. 012/CHE/04, entitled "A Method of Manufacturing Integral Wheel Rim and Disc Assembly of a 5° Taper Bead-Seat of Flat or Semi-Drop Center Rim and Integral Wheel Construction," filed on Jan. 7, 2004, and Indian Patent Application No. 013/CHE/04, entitled "A Method of Manufacturing One-Piece Wheel of a 5° & 15° Drop Center Rims and the One-Piece Wheel Construction", filed on Jan. 7, 2004, the entire disclosures of which are hereby incorporated by reference as if being set forth in their respective entireties herein.

Please delete Paragraph 0009.

Serial No.: 10/585,389

Please Replace Paragraph 00043 with the following:

A method of manufacturing the embodiment of the wheel set forth in FIG. 16, is shown in FIGS. 9 through 15. FIG. 9 shows a schematic sectional view of the steel disc substrate 100 having a center hole therethrough prior to forming pursuant to the method of this invention. The blank may be of any size or thickness which permits the wheel to be shaped to the desired dimensions.

Please Replace Paragraph 00044 with the following:

FIG. 10 shows the first step of manufacturing one-piece wheels having 5.degree. taper bead-seat of flat base or semi-drop center steel wheels which comprise spinning and flow forming the steel disc substrate of FIG. 9. Preferably, the disc is spun and flow formed into a preformed shape 102 in a CNC 4-axis spinning machine or similar device. More specifically, the preform 102 is held between inner mandrel M1 and clamping plate C1. Shaping rollers R1 are mounted on a hydraulically actuated slide of the spinning machine which imparts a rolling pressure on the outer peripheral portion of the preform. The spinning and rolling pressure reduces the thickness of the disc and rim portions while forming the cylindrical shape and profile in the rim portion of the preform in accordance with predefined settings in the spinning machine. The outboard surface of inner mandrel M1 corresponds to the predetermined cylindrical shape and profile of the inner diameter of the rim portion. Furthermore, this step may comprise one or more passes of shaping rollers R1 to produce the desired shape and profile of the preform.

Serial No.: 10/585,389



Replace Paragraph 00046 with the following:

FIG. 13 shows yet another subsequent step wherein the preform 102 is subjected to forward and backward spinning to extend and further form the rim portion comprising gutter 1, well 2, tapered tire bead seat 3, second bead seat 104, and flange 4 into a cylindrical shape of desired thickness, diameter and width. Also, during backward spinning the rim portion comprising gutter 1 is spun in such a way that the material is displaced in a backward direction, also to a predetermined thickness, diameter and width.